

## MODIS IOT Weekly Report

Mission Operations Days: 2000/071 to 2000/077

March 10, 2000 20:00:00 GMT to March 17, 2000 20:00:00 GMT

### Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has no known Anomalies

Blackbody	On	Nominal
Calibration Electronics	On	Nominal
Control Processor	A On; B off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	On	Nominal
FIFO Memory	On	Nominal
Format Processor	On	Nominal
PC FPA	On	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	On	Nominal
NIR	On	Nominal
SMIR	On	Nominal
LWIR	On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	On	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On, B Off	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	66,67	Nominal

### This Week's Completed MODIS Activities:

Friday, March 10, 2000

070/20:11:00 – 20:22:49

Real-time Ecal Sweep; Vcal starts 48,43,53,60  
8 Vcal steps of 1 DN, Nstep of 22,22,22,10

070/21:39:23 Real-time - Set new gain values for bands 5, 14H, and 16  
070/21:59:17 Real-time - Set Blackbody to 290K  
070/22:14:29 ATC – OA15: SD/SDSM Open Double

Saturday, March 11, 2000

071/03:11:08 ATC – OA16: SD/SDSM Screened Double  
071/08:07:46 ATC – OA16: SD/SDSM Screened Double  
071/13:04:25 ATC – OA15: SD/SDSM Open Double  
071/16:35:43 – 16:42:11 ATC – OA14: Sector Rotation for entire cavity (DCR Off)  
Deltas of 0, 1776, 4711, 5643, & 6842  
071/18:00:04 ATC – OA16: SD/SDSM Screened Double

Sunday, March 12, 2000

072/03:54:06 ATC – OA16: SD/SDSM Screened Double  
072/08:50:44 ATC – OA15: SD/SDSM Open Double  
072/14:29:58 – 14:41:48 Real-time Ecal Sweep; Vcal starts 48,43,53,60  
8 Vcal steps of 1 DN, Nstep of 20,20,20,8  
072/15:26:14 ATC – OA16: SD/SDSM Screened Double  
072/15:39:45 – 15:52:23 Real-time Ecal Sweep; Vcal starts 48,43,53,60  
8 Vcal steps of 1 DN, Nstep of 18,18,18,6  
072/16:23:01 – 16:34:47 Real-time Ecal Sweep; Vcal starts 48,43,53,60  
8 Vcal steps of 1 DN, Nstep of 22,22,22,10  
072/20:23:52 ATC – OA16: SD/SDSM Screened Double

Monday, March 13, 2000

073/01:19:29 ATC – OA16: SD/SDSM Screened Double  
073/02:14:40 ATC – OA19: SRCA Full Radiometric  
073/04:37:14 ATC – OA15: SD/SDSM Open Double  
073/07:54:59 ATC – OA15: SD/SDSM Screened Double  
073/11:12:44 ATC – OA15: SD/SDSM Screened Double  
073/13:54:52 – 15:33:45 ATC – OA24: SRCA 10W Radiometric (Rad Feedback Mode)  
073/20:30:23 – 22:09:15 ATC – OA24: SRCA 10W Radiometric (Constant Current  
Mde)

Tuesday, March 14, 2000

074/00:23:45 ATC – OA15: SD/SDSM Open Double  
074/03:05:53 – 04:44:45 ATC – OA25: SRCA 1W Radiometric  
074/05:20:22 ATC – OA16: SD/SDSM Screened Double  
074/16:52:30 ATC – OA16: SD/SDSM Screened Double  
074/18:31:22 ATC – OA15: SD/SDSM Open Double  
074/20:38:52 Drag Make-up Maneuver 22.777 seconds long  
074/22:17:10 Real-time: Reset Band 5 & 16 gains to incorrect (launch) values  
074/23:01:31 Real-time: Memory Dump of Table 4, PV Gains

Wednesday, March 15, 2000

075/00:59 – 01:10:42 Real-time: Several Itwk sweeps; Vdet =226  
Itwk = 70 through 250 by steps of 10  
075/01:37:16 – 01:48:34 Real-time: Several Itwk sweeps; Vdet =225

	Itwk = 70 through 250 by steps of 10
075/02:36:34 – 02:48:07	Real-time: Several Itwk sweeps; Vdet =224
	Itwk = 70 through 250 by steps of 10
075/02:45:46	ATC – OA16: SD/SDSM Screened Double
075/03:23:05 – 03:34:35	Real-time: Several Itwk sweeps; Vdet =223
	Itwk = 70 through 250 by steps of 10
075/04:14:08 – 04:25:50	Real-time: Several Itwk sweeps; Vdet =222
	Itwk = 70 through 250 by steps of 10
075/05:28:40 – 05:40:11	Real-time: Several Itwk sweeps; Vdet =221
	Itwk = 70 through 250 by steps of 10
075/06:19:35 – 06:31:12	Real-time: Several Itwk sweeps; Vdet =220
	Itwk = 70 through 250 by steps of 10
075/07:10:51 – 07:22:25	Real-time: Several Itwk sweeps; Vdet =219
	Itwk = 70 through 250 by steps of 10
075/07:42:25	ATC – OA16: SD/SDSM Screened Double
075/08:47:54 – 08:59:31	Real-time: Several Itwk sweeps; Vdet =218
	Itwk = 70 through 250 by steps of 10
075/12:42:52	ATC – OA15: SD/SDSM Open Double
075/15:05:19 – 16:02:50	ATC – OA23: SRCA Full Spatial
075/19:14:36	ATC – OA16: SD/SDSM Screened Double

Thursday, March 16, 2000

076/07:00	ATC – Blackbody to 280K
076/12:00	ATC – Blackbody to 285K
076/15:00	ATC – Blackbody to 290K
076/15:00	Real-time – Set Blackbody duty cycle to 100%
076/17:00	ATC – Blackbody to 295K
076/18:45:43	Yaw Maneuver +15 deg (33 min, 54 sec)
076/19:00	ATC – Blackbody to 300K
076/20:24:35	Yaw Maneuver -15 deg (33 min, 54 sec)
076/20:49:41	Real-time – Blackbody to 33%
076/21:00	ATC – Blackbody to 270K
076/21:22:31	Real-time – Reset gain changes for bands 5 & 16 to correct launch values
076/21:36:46	Real-time – Ran MOD_MEM_HALT to clear memory transfer
076/22:10:18	Real-time – Dumped PV Gain Table

Friday, March 17, 2000

077/15:04:20	Real-time Set Blackbody to 290K
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This Week's Scheduled MODIS Activities Not Completed:

076/21:27:04	Real-time – Failure during 1 <sup>st</sup> dump attempt of gain table due to ground system error.
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Upcoming MODIS Events:

\*SRCA activities are scheduled, but inhibited (so they will not execute) until further notice.

Friday, March 17, 2000

077/20:41:03 ATC – OA16: SD/SDSM Screened Double

Saturday, March 18, 2000

078/03:16:35 ATC – OA16: SD/SDSM Open Double

078/09:52:06 ATC – OA16: SD/SDSM Screened Double

078/16:27:38 ATC – OA16: SD/SDSM Screened Double

078/23:03:09 ATC – OA16: SD/SDSM Open Double

Sunday, March 19, 2000

079/05:38:41 ATC – OA16: SD/SDSM Screened Double

079/12:14:12 ATC – OA16: SD/SDSM Screened Double

079/18:49:44 ATC – OA16: SD/SDSM Open Double

Monday, March 20, 2000

080/01:25:15 ATC – OA16: SD/SDSM Screened Double

080/08:00:47 ATC – OA16: SD/SDSM Screened Double

080/14:36:18 ATC – OA16: SD/SDSM Open Double

080/21:11:50 ATC – OA16: SD/SDSM Screened Double

Tuesday, March 21, 2000

081/03:47:21 ATC – OA16: SD/SDSM Screened Double

081/10:22:53 ATC – OA16: SD/SDSM Open Double

081/15:00?? Real-time Set Blackbody duty cycle to 100%

081/15:00 ATC – Blackbody to 315K

081/16:58:24 ATC – OA16: SD/SDSM Screened Double

081/22:00:00 ATC – Blackbody to 270K

081/22:15:58 Real-time Set Blackbody duty cycle to 33%

081/23:33:56 ATC – OA16: SD/SDSM Screened Double

Wednesday, March 22, 2000

082/12:01:13 ATC – OA-23 SRCA Full Spatial

082/19:00:00 ATC – Blackbody to 290K

082/?? Real-time Ecal sweeps

Thursday, March 23, 2000

083/15:00?? Real-time Set Blackbody duty cycle to 100%

083/15:00:00 ATC – Blackbody to 315K

083/22:00:00 ATC – Blackbody to 270K

083/22:00?? Real-time Set Blackbody duty cycle to 33%

Friday, March 24, 2000

084/08:28:01 ATC – OA-22 SRCA Full Spectral Part 1

084/10:22:46 ATC – OA-22 SRCA Full Spectral Part 2

084/11:45:11 ATC – OA-22 SRCA Full Spectral Part 3

084/13:00 ATC – Blackbody to 290K  
084/13:40:31 ATC – OA-22 SRCA Full Spectral Part 4  
084/16:52:51 ATC – 1st Roll Manuever to view moon in space-view port (-19.5 deg)  
Sector rotation to –3072, DCR off, Formatter Day rate  
084/19:00?? Real-time Set SMIR Itwk / Vdet to ?? / ??  
084/20:09:57 ATC – 2nd Roll Manuever to view moon in space-view port (-19.0 deg)  
Sector rotation to –3072, DCR off, Formatter Day rate  
084/21:00?? Real-time Set SMIR Itwk / Vdet to ?? / ??

Fri, March 24, 2000 - MODIS Roll Maneuver (-19 deg)  
Tue, April 25, 2000 - MODIS Yaw Maneuvers  
Wed, April 26, 2000 - MODIS Yaw Maneuvers  
Thur, April 27, 2000 - Inclination Maneuver  
Fri, April 28, 2000 - Post-inclination Drag Makeup Maneuver

MODIS Anomalies:

None.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

Telemetry is nominal.

Non-MODIS Significant Events:

The transition to normal operations continues as the FOT has begun running our morning status meeting as Project Leads begin the handover.

Limited Life Item Status:

SRCA 10W Lamp #1: 146.0 of 500 hours  
SRCA 10W Lamp #2: 124.5 of 500 hours  
SRCA 10W Lamp #3: 133.7 of 500 hours  
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 545.5 of 4000 hours  
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1121 of 3022 Movements

Nadir Aperture Door: 530 of 1316 Movements  
Space View Door: 436 of 1316 Movements